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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,804	04/06/2001	Timothy Roy Block	IBM / 180	6868

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EXAMINER

CHU, GABRIEL L

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,804

Applicant(s)

BLOCK ET AL.

Examiner

Gabriel L. Chu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 20-30 is/are allowed.
- 6) ☒ Claim(s) 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 15-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2003/0159084 to Murphy et al. The body of this rejection can be found in paper no.

4.

Allowable Subject Matter

3. Claims 15-19 are objected to as being dependent upon a rejected base claim and containing objectionable subject matter, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, further correcting for the indicated objectionable subject matter. Referring to claims 15-19, the prior art does not teach or fairly suggest, in light of the parent claims, shutting down the first node comprises: (a) transmitting a signal to each of the other nodes in the plurality of nodes to initiate on each of the other nodes a node leave operation that terminates clustering with the first node; and (b) preemptively terminating a second group member resident on the first node prior to any detection of the failure by the second group member.

4. Claims 1-12 and 20-30 are allowed.

Response to Arguments

5. Applicant's arguments filed 29 March 2004 have been fully considered but they are not persuasive. Referring to Applicant's argument that an integrity protector, as

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disclosed by Murphy et al., is not a "group member", Examiner notes that Applicant has nowhere claimed, in either claim 13 or 14, of what a "group" may consist. Further not claimed is that "a group is a collection of related jobs or processes cooperatively executing on different nodes to handle a computer task" and that "such cooperative jobs (referred to as "members") are typically capable of communicating with one another, and are assigned a common identifier to indicate common membership in a group". Given the lack of limiting language in claims 13 and 14, a "group member" is given its broadest reasonable interpretation as a "member of a group", such a group being an "assemblage of persons or objects gathered or located together; an aggregation" or "a number of individuals or things considered together because of similarities". Examiner suggests that Applicant incorporate defining attributes of their invention into the claim.

Examiner further notes that an integrity protector, as disclosed by Murphy et al., meets the definition provided by Applicant (collection of related jobs/processes cooperatively executing on different nodes to handle a computer task). From paragraph 15, "As a clustered computing system, one embodiment of the invention includes a cluster of computing nodes having at least two computing nodes, and an integrity protector provided with each one of the computing nodes. The integrity protector operates to determine whether a set of computing nodes in the cluster are to remain active. The set of computing nodes represents at least a portion of the cluster. In addition, the integrity protector operates to allow one or more computing nodes in the set of computing nodes to take over services of one or more other computing nodes of the clustered computing system only after the one or more other computing nodes have

shutdown." At least this citation clearly shows a collection of processes, such processes cooperating at least for the task of coordinating cluster activity. That Murphy et al. do not "refer" to integrity protectors as "group members" has no relevance to the patentability of the claim. A claim limitation need only be met on functionality.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (703) 308-7298. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel, Jr. can be reached on (703) 305-9713. The fax

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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gc


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